

**IN THE UNITED STATES PATENT & TRADEMARK OFFICE**

<p>ART UNIT: 1794</p> <p>EXAMINER: Betelhem Shewareged</p> <p>FIRST NAMED INVENTOR: Vladek Kasperchik</p> <p>SERIAL NO.: 10/783,610</p> <p>FILED: 2/19/2004</p> <p>CONF. NO.: 1622</p> <p>FOR: DURABLE PRINTED COMPOSITE MATERIALS AND ASSOCIATED METHODS</p> <p>DOCKET NO.: 10004809-1</p>	<div style="border: 1px solid black; padding: 5px;"><p align="center"><b><u>CERTIFICATE OF MAILING</u></b> <b><u>UNDER 37 C.F.R. § 1.8</u></b></p><p>DATE OF DEPOSIT: <u>February 16, 2010</u></p><p>Thereby certify that this paper or fee (along with any paper or fee referred to as being attached or enclosed) is being submitted on the date indicated above via:</p><p><input checked="" type="checkbox"/> EFS Web</p><p><input type="checkbox"/> facsimile to _____</p><p><input type="checkbox"/> the United States Postal Service with sufficient postage as first class mail addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.</p><p align="right">/brendawiseman/ _____ Brenda Wiseman</p></div>
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**APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. § 41.41**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
Mail Stop Appeal Brief – Patents

Dear Sir:

Appellants submit this Reply Brief in response to the Examiner's Answer mailed on December 18, 2009, and in connection with the Appeal Brief filed on September 16, 2009, in the above-identified application.

STATUS OF CLAIMS

Claims 1-5 and 7-49 remain pending. Claim 6 has been canceled. Claims 1-5, 7-14, and 49 are rejected and claims 36-48 are allowed. Claims 15-35 have been withdrawn. The claims on appeal in this application are claims 1-5, 7-14, and 49.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The issues presented for review are:

- a. whether claims 1-5, 7-13, and 49 are unpatentable under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 6,849,149 (hereinafter “Otaki”) in view of U.S. Patent No. 4,893,887 (hereinafter “Coates”) and U.S. Patent No. 4,378,392 (hereinafter “Segel”);
- b. whether claim 14 is unpatentable under 35 U.S.C. 103(a) as being obvious over Otaki in view of Coates.

### ARGUMENT

The arguments set forth in this Reply Brief are provided to respond specifically to Examiner's arguments made in the Examiner's Answer issued December 18, 2009 (hereinafter "the Answer"). Any arguments presented by Appellants in the Appeal Brief filed on September 16, 2009 (hereinafter "the Appeal Brief") but not repeated here are not to be construed as having been disavowed or withdrawn by Appellants absent an explicit statement to the contrary.

#### *Rejection of Claims 1-5, 7-13, and 49 over Otaki in view of Coates and Segel*

In the Appeal Brief, Appellants have pointed out that the spatial relationship between the layers of Otaki and those of the claimed invention do not match. Specifically, claim 1 requires that the printable layer be adjacent to the adhesive layer and opposite the metallic layer such that the reflective sheen background of the metallic layer is visible through the printable layer (i.e. the printable layer is above or closer to the viewing surface of the printed composite material). Assuming (as the Examiner has) that the holographic layer was analogous to the claimed metallic layer, its relationship in the printed composite does not meet the spatial relationship requirements of claim 1. Instead, Otaki teaches that the volume hologram layer is above the printed information, i.e. closer to the viewing surface of the compositional layer.

On page 6, line 19 to page 7, line 3 of the Examiner's Answer, the Examiner has asserted that "the claimed invention does not exclude the presence of other layers." The Examiner has further asserted that Otaki teaches that the hologram laminate can be seen through transparent film and adherend substrate on which the laminate lies. Appellants respond that this is a flawed interpretation of the cited teaching, and further that the teaching does not suggest the claimed

arrangement. Appellants point out again that Otaki teaches that the hologram layer is above the information-bearing transparent film, and the laminate is configured to be viewed from above.

The language the Examiner cites does not contradict this. Said language states:

The term “transparent” means that an article located at the opposite side of the hologram laminate is seen through the adherend substrate **204**, and, hence, refers to not only a colorless, transparent state but also a colored, transparent state.

Column 26, lines 54-58.

The Examiner has misinterpreted Otaki’s attempt to define “transparent” with regard to the transparent film. That is, Otaki is using points of reference to explain that that the “transparent” material is one that could be seen through, if it were so situated. However, that does not mean that the hologram layer in the laminate of Otaki is actually visible through that film, as the laminate is actually viewed from the other side (i.e. opposite the adherend).

In addition, claim 1 requires a metallic layer that provides a reflective sheen background to the printable layer. As mentioned above, the Examiner has suggested that the hologram layer of Otaki in view of Coates corresponds to the metallic layer of claim 1. However, the hologram layer does not meet the requirements of the claimed metallic layer, because the hologram is not configured to provide a reflective sheen. Rather, Otaki teaches that the whole volume hologram is to be transparent. Col. 33, line 66 to col. 34, line 1.

The Examiner has suggested that it would be obvious to combine the metal hologram of Coates with the invention of Otaki. Answer, page 4, line 22 to page 5, line 2. However, modifying the laminate of Otaki to include a reflective metal hologram would render the laminate unsuitable for its intended purpose, as that laminate requires a transparent hologram. *In re*

*Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). Therefore, Appellants again submit that there is no motivation for such a modification.

Appellants have also pointed out that Segel does not teach or suggest a printable layer including an ink receiving layer as required by claim 1. The layer taught by Segel is not configured to be printed upon, is printless, and does not comprise an ink receiving layer. In the Answer, the Examiner has asserted that “Segel is used to teach an adhesive layer containing UV stabilizer” in combination with Otaki. Page 7, lines 11-14. Appellants submit that even if Segel teaches a laminate comprising UV stabilizers, the combination of Segel, Otaki, and Coates nevertheless does not teach each and every element of claim 1 of the present application.

*The Rejection of Claim 14 over Otaki in view of Coates*

In the Appeal Brief, Appellants have pointed out that neither Otaki nor Coates teach a metallic foil as required by claim 14. A metallic foil, as commonly understood, is an independent, thin sheet of self-supporting metal that is separate and distinct from the other layers. This is to be contrasted with a deposited layer formed directly on a substrate. This distinction is understood by those skilled in the art, and more particularly is set forth in Appellants’ specification. See Application page 7, lines 17-18.

The Examiner has acknowledged that the metal hologram of Coates is a deposited layer. Answer, page 8, lines 5-6. The Examiner has asserted however, that “there is nothing that suggest [*sic*] the layer is not self-supporting after it has been formed.” page 8, lines 6-7. The Examiner has cited the material and thickness taught in Coates and concludes that “the metallic layer of Coates is a functional equivalent of the claimed metallic foil.” Appellants again point out

that the fact that the metal layer of Coates is always formed and mounted on a substrate is evidence that it is not independent from the substrate. As such, there is no evidence that the metal layer is a foil. Furthermore, Appellants point out that the claim at issue recites metallic foil as a particular structural feature, not merely as a functional limitation. Appellants definition of metallic foil as independent and self-supporting is a structural description of the element. As such, Appellants submit that it is immaterial whether the recited foil is intended to be separated from the claimed composite. Appellants again assert that Coates does not teach a metal foil as required by claim 14.

CONCLUSION

Appellants respectfully submit that the claims at issue are patentably distinct from the asserted prior art references. Particularly, none of the asserted combinations of references would teach one of ordinary skill in the art within the meaning of 35 U.S.C. § 103(a) to arrive at the presently claimed invention. Appellants contend that Otaki, Coates, and Segel fail to teach each and every element of the claimed invention, and that a *prima facie* case of obviousness has not been established.

For at least these reasons, Appellants respectfully request that the Board of Appeals reverse the rejection and remand the case to the Examiner for allowance

DATED this 16<sup>th</sup> day of February, 2010.

Respectfully submitted,

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